## 2024 Ph.D. course on Sewer Processes

## Modeling of sewer microbial and chemical processes

The course provides a basis for up-to-date knowledge and modeling of sewer microbial and chemical processes and shows how this understanding can be applied for design, operation, and maintenance of wastewater collection systems. A central focus of the course is on predicting critical impacts and controlling adverse effects of hydrogen sulfide and other toxic/noxious gases.

The course:

- Highlights the importance of aerobic, anoxic, and anaerobic processes
- Details the development of sewer process models
- Present new modeling tools for the design and operation of sewer networks
- The models Mega-WATS and Mega-Vent will be used throughout the course

During the course, the participants will get hands-on experience with setting up numerical sewer processes models and with designing experiments for determination of central model parameters. In addition, the course will introduce experimental methods to quantify wastewater quality in terms of biodegradability and chemical composition.

The course is aimed at Ph.D. students and sewer process specialist in the water industry.

Keywords: Sewer Odor, Concrete Corrosion, Sewer process modelling

Registration is free, but the number of seats is limited to 20. On-line registration is possible via this link: https://phd.moodle.aau.dk/login/index.php

The course is supported by the Horizon 2020 project Co-UDLABS. Food and drinks during the course days will be provided.

For more details contact Asbjørn Haaning Nielsen: <a href="mailto:ahn@build.aau.dk">ahn@build.aau.dk</a>. It is encouraged to send a notification of interest including your affiliation and a short motivation for your interest in the topic.

Organizers: Asbjørn Haaning Nielsen & Jes Vollertsen

Time: October 7 – 11, 2024, Deadline for registration: 16 September 2024

Venue: AAU BUILD, Thomas Manns Vej 23, 9220 Aalborg, Denmark

ECTS: 5





